## Bajor, John

From:

Cooney, Nigel (ENRD) < Nigel.Cooney@usdoj.gov>

Sent:

Friday, April 20, 2018 3:52 PM Anson Keller, Gary H. Baise

To: Cc:

Branigan, Terence; Rog, Morgan; Beth Admire; DTENNIS@idem.IN.gov; Bahr, Ryan;

Bajor, John; Fericelli, Paul

Subject:

Jeffersonville - EPA and IDEM technical questions

Attachments:

Jeffersonville - Technical Questions 04-20-2018.pdf

Anson and Gary – Please see the attached list of questions from EPA and IDEM regarding Jeffersonville's proposed sewer projects, following our meeting and facility tour last Tuesday.

As we discussed during that meeting, we await Jeffersonville's written documentation regarding the number of households in the service area for purposes of assessing Jeffersonville's financial capability.

Thanks, Nigel

## Nigel B. Cooney

U.S. Department of Justice Environmental Enforcement Section Environment and Natural Resources Division Ben Franklin Station - P.O Box 7611 Washington, DC 20044-7611

Tel: 202/514.3145 Fax: 202/616.6584

Overnight Mail: 601 D Street, NW Washington, DC 20004 Following our facility tour and technical discussion on April 10, 2018, EPA and IDEM hereby submit the following inquiries about technical aspects of Jeffersonville's proposed changes to CSO controls. EPA and IDEM may have additional questions, including questions about the H&H model later.

- 1. Please provide the influent flow volume at the Downtown WWTP for all events that are considered a wet weather storm event in the typical year.
- 2. Please provide an updated list of all Phase 2 and Phase 3 projects and green infrastructure projects, including the proposed changes to the CSO interceptors and the CEHRT unit. Please include for each project its design criteria and performance criteria.
- 3. Please clarify whether the "2017 Revised Scenario Typical Year Model Results" table, on page 4 of your January 8, 2018 letter, reflect the runoff reductions from green infrastructure projects and sewer separation projects that the City has implemented and/or plans to implement. If not, please provide and updated "2017 Revised Scenario Typical Year Model Results" table reflecting the runoff reductions from green infrastructure projects and sewer separation projects that the City has implemented and/or plans to implement.
- 4. Please clarify the table on page 4 of your January 8, 2018 letter. Does "days" in that table mean number of events? And what is the total number of events to Cane Run and the total number of events to the Ohio River that are projected to result from Jeffersonville's proposal?
- Please provide an engineering demonstration to validate the performance and size of the UV disinfection system for the proposed scenarios during the typical year.
- 6. We request that Jeffersonville submit Standard Operating Procedure describing how it plans to monitor/sample the flows from the conventional treatment and the High Rate Treatment Unit to ensure representative sampling and to describe how those results will be averaged for comparison to each of the NPDES effluent limits.
- 7. We request that Jeffersonville submit the results of the high rate treatment phosphorus study that it conducted.
- Please provide other engineering solution alternatives to reduce the proposed frequency of overflows and the reductions in each alternative scenario.

Please provide the following information for the current and proposed scenarios at the Downtown WWTP during the typical year.

Information	Current scenario	Proposed scenarios (addition of a 25 MGD CEHRC Unit and 25 MGD UV expansion)		
	Up to 50.0 MGD Flow	Between 0.0 and 25.0 MGD Flow	Between 25.0 and 50.0 MGD Flow	Between 50.0 and 75.0 MGD Flow
Percent captured for treatment on a system- wide annual average basis	7			
Frequency of overflows per CSO outfall during the disinfection season				
Frequency of overflows per CSO outfall during the non-disinfection season				
CEHRC effluent concentration in terms of CBOD5, TSS and TP	N/A			
CEHRC percent removal in terms of CBOD5, TSS and TP	N/A			1
CEHRC solid retention time values	N/A			
Particle size distribution of influent flow at the UV System			4	

- 10. Please explain how the percent captured was calculated in your response to item 9, above.
- 11. How much capacity to receive additional flow beyond 50 MGD do the existing oxidation ditches and clarifiers have?
- 12. In addition to high rate treatment, please assess the feasibility, cost and expected performance of a HRT that has a biological component. If the existing oxidation ditches and clarifiers have additional flow capacity, that may be considered.
- 13. Please recreate the Attachment F of your January 8, 2018 letter in function of the total dynamic head.
- 14. After the end of the meeting, Jeffersonville raised a question about overflow events that may not fit the CSO Discharge definition in the Consent Decree. Can Jeffersonville explain further its question?